

# Sandians Win Three More Research Awards

Three materials research projects at Sandia have received DOE Basic Energy Science (BES) awards for outstanding achievement in FY86.

This is the second year in a row that Sandia has received three of the BES Materials Science Awards. Since the program began in 1981, Sandians have received ten of the awards — nine at Albuquerque and one at Livermore. Each award brings with it a \$40,000 grant for capital expenditures. "The prizes not only recognize our achievements but also help buy equipment in the areas that received the awards," says Fred Vook, Director of 1100 and coordinator for the Albuquerque BES program at Sandia.

This year, an award for "Outstanding Scientific Accomplishment" went to Jim Knapp (1111) and David Follstaedt (1112) for their work with quasicrystals, a new phase of solid-state materials (see related story). Their work thus far has put them in the forefront of an exciting new area of materials science.

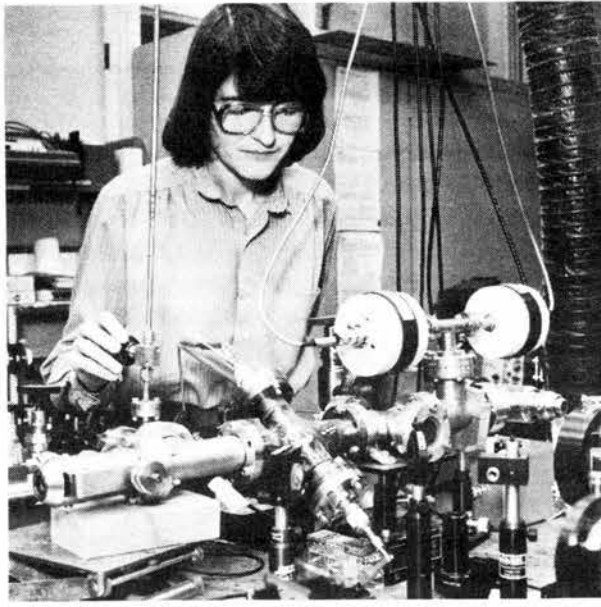
Dale Schaefer (1152), Keith Keefer (1845), Alan Hurd (1152), and Jeff Brinker (1846) jointly received a "Sustained Outstanding Research" award. Their project is titled "Growth and Structure in Ceramic Precursors." This work studies the molecular and macromolecular organization of ceramic powders.

The third award this year went to Carol Ashby (1126) for a project with "Significant Implication for Department of Energy-Related Technologies." The goal of her project, "Selective Photochemical Etching of Semiconductors Using Surface Electronic Properties," is to achieve selective etching of semiconductors using light sources that take advantage of the electrical and chemical properties of specific semiconductor materials.

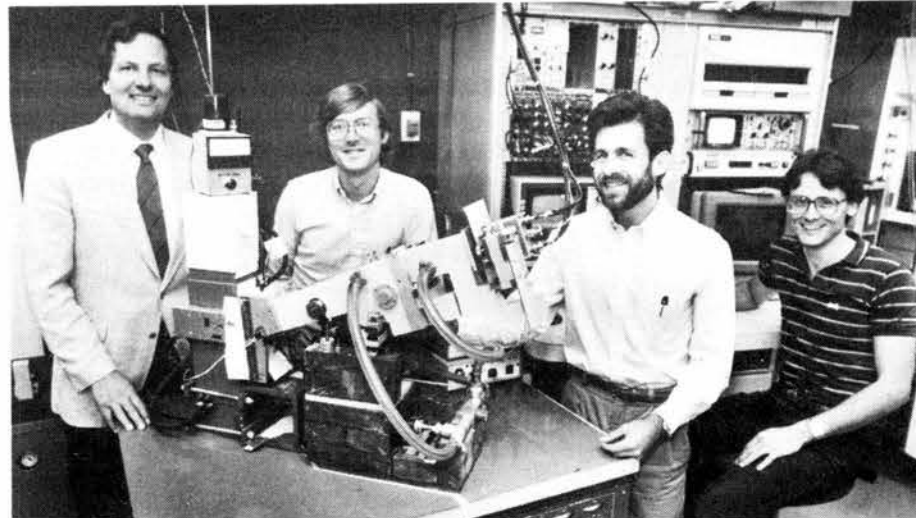
Both of these latter projects will be covered in future issues of LAB NEWS.

"The awards are significant because they are voted by our peers at other laboratories," says Fred. "The recognition we've received in winning six out of the seventeen possible awards in the last two years is especially pleasing because we have quite a small

*(Continued on Page Four)*



CAROL ASHBY (1126), winner of a Materials Science Award for work in semiconductor etching, with the laser etching apparatus.



X-RAY SCATTERING MACHINE used to analyze chemically prepared ceramic powders. From left, Dale Schaefer (1152), Keith Keefer (1845), Jeff Brinker (1846), and Alan Hurd (1152), winners of BES Materials Science Award for their ceramics research.

## LAB NEWS

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### 'Slight Growth'

## FY 87 Budget Outlook: Better than Expected

Sandia funding for FY87 is authorized at a higher level than the belt-tightening that had been anticipated, according to Bill Hollis, manager of Budget and Financial Planning Dept. 140. It all becomes official when the Labs receives the Approved Funding Programs from DOE.

"Congress passed a continuing [funding] resolution on Oct. 17 that covers all of FY87," says Bill. "Most important — from the Sandia standpoint — is the Energy and Water Development [E&WD] appropriation covered by the resolution. It's from that appropriation that the Labs weapons and most of its energy programs are funded."

The DOE weapons activity portion of E&WD is funded at \$4.2 billion for the coming year, Bill reports. Of that amount, Sandia will receive slightly more than \$560 million for operating expenses — up from \$530 million in FY86. "Our worst-case scenario had been that our budget would be flat in FY87 — about the same as last year," says Bill. "But our weapons activity funding for this fiscal year, as a result of the recent continuing resolution, will cover not only cost increases due to inflation, but will even give us slight growth in FY87."

The total funds received for weapons work at the Labs have yet to be allocated. That won't occur until Sandia's internal budget is repriced, based on a new General and Administrative (G&A) expense allocation method, and until the budget is realigned for the recent Labs reorganization.

As anticipated, Sandia's budget for energy programs in FY87 will remain flat at the \$105 million level. "Other defense" programs (waste management defense, verification and control technology, and nuclear safeguards and security) combined will receive slightly lower funding, as expected. Funding

for these programs totaled about \$62.8 million in FY86.

"Reimbursable" activity (work done for non-DOE agencies) at the Labs will increase in FY87. Sandia's Direct Program Committee, chaired by EVP Tom Cook until his retirement Oct. 31, authorized a dollar increase for FY87 reimbursables, from \$260 million in FY86 to \$300+ million this year, as well as an increase in the number of Labs employees working on reimbursable programs. Most of the increase is in the SDI and Advanced Military Technologies areas.

Overall population totals at the Labs will be essentially the same in FY87 as they were last year, according to Bill. "We had some 8250 employees on roll at the end of FY86," he says, "and we project about that same number, come next September."

"Personnel [the 3500 organization] has proposed to Small Staff a recruiting program for both FY87 and FY88 that will bring some 500 people a year into the Labs," Bill continues. "They will replace employees lost to attrition; they will not increase the total number of employees."

"Our normal separations allow for a reasonably aggressive hiring program and, for the foreseeable future at least, we're not recommending a change in total population numbers," he says. "For example, we have started work on our FY89 budget submission, which will show approximately the same number of employees as now. However, this number is looked at annually and adjusted as necessary based on changes in national priorities."

Sandia's vigorous construction program (see LAB NEWS, Oct. 24, 1986) will continue this year, though no new starts are authorized in FY87. "Projects approved in prior years are funded at a satis-

factory level," says Bill. He also says that Sandia plans call for some new construction starts in FY88, but that it's too early to speculate on them at this point.

Major computer acquisitions (items with a cost of more than \$1 million) are funded at \$10,560,000 for FY87. These include a \$5 million capital outlay for conversion from lease to purchase of a Cray XMP-24 at SNLA; time-share expansion at SNLA, \$460,000; a computer network upgrade at SNLL, \$1.1 million; and Computer-Integrated Manufactur-

*(Continued on Page Five)*



BILL HOLLIS'S (140) grin may reflect the fact that Sandia funding for FY87 is authorized at a higher level than anticipated.



# Antojitos

Home on the Rearranged Org Chart Congrats to promotees Orval, Roger, Dan, Peter, and Larry; and to lateralees Everet, Bob, Leon, Ron, and (soon) Arlyn. I look forward to working with you. (Sure hope that feeling is mutual).

With Everet running out of energy, so to speak, it's a good time to tell "the WIPP story." Seems that a year and a half ago George Dacey (then 1), Tom Cook (then 20), Ev Beckner (then 6000), Dick Lynch (6300), Wendell Weart (6330), Al Lappin, and Steve Lambert (both 6331) set off to tour the WIPP Site near Carlsbad. Al had booked DOE's fanciest van and had specifically asked that it be filled with gas -- wouldn't want that crew to be stranded in the boondocks.

So he checked the gas gauge as soon as he climbed into the driver's seat. Empty. So they wheeled into a service station, only to find that the tank wouldn't hold more than a couple of gallons. Two possible explanations for this phenomenon, reasoned the seven PhDs: 1) An airlock of some kind is preventing the gasoline from getting into the empty tank, or 2) The gauge is broken. The experimental solution: Rock the van; perhaps the airlock can be broken in the same way that you burp a baby, or perhaps the gauge needle will jiggle, indicating that it's not broken after all. But both tests were inconclusive.

And, with time for WIPP Site arrival drawing near, the group decided to trust to luck and head out. Two miles away from the site, they gained some conclusive data: The gauge was accurate -- they ran out of gas. But it was a beautiful spring afternoon, no one from the Combustion Research Facility was available, and there were few other choices -- so they trudged on in to the site. Fortunately, the 6330 folks had warned the VIPs to wear old clothes and shoes. Unfortunately, George had followed the letter of the warning, not the intent: His shoes were old but not comfortable. And his was the only blister.

The tour itself went very well. In fact, George said it was a tour he'd never forget.

(Four-wheelers and other outdoor types have probably already solved the mystery -- the van had two gas tanks, one was full; the gas gauge was connected to the other one; the transfer lever was under the driver's seat.)

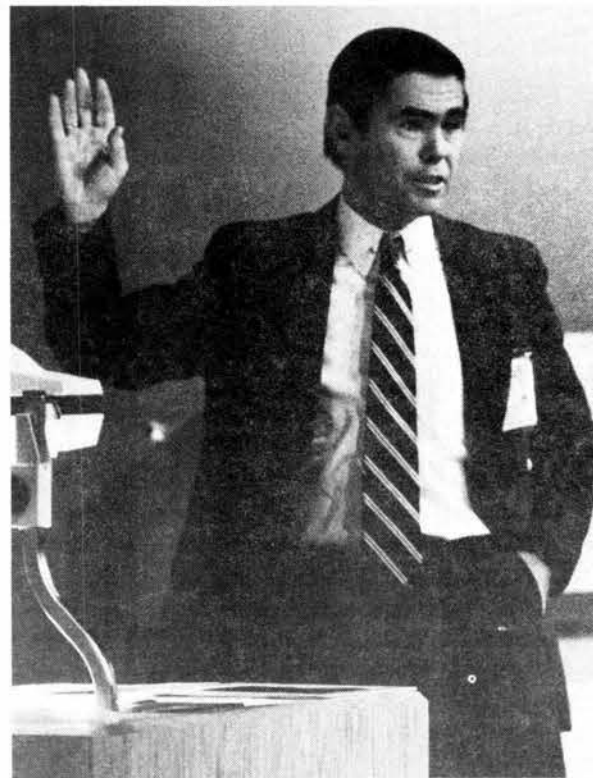
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Time for Some Kirtland-Consciousness-Raising, LLNL? The Oct. 20 issue of Defense Week carried this little item: Visitors to Sandia National Laboratories one day last week found a long line at the front desk [actually, at a KAFB gate] of the tightly guarded complex. To speed things along, the guard offered to let anyone with an official ID bypass the normal procedures and go right on in. Breathing a sigh of relief, two men stepped out of line and displayed badges from Los Alamos National Laboratory. "OK," said the young military guard.

They were followed by individuals with badges from the Energy Department's Bendix plant ("OK") and Martin Marietta Corp. ("OK, again").

Moving to join the by now steady stream entering the lab grounds, two men held up badges from Lawrence Livermore Laboratory. "Livermore?" asked the guard. "What's that?" One of the surprised men tried to explain that the national lab, located outside San Francisco, is a sister facility to Sandia, just like Los Alamos.

"Sorry," said the guard. "Never heard of it." ●BH



ADDRESSING A SESSION of the Army Science Board is Jay Sculley, Jr., Assistant Secretary of the Army for Research, Development and Acquisition. Sculley, who oversees the work of the Board, was highly satisfied with the meeting: "Many Board members were able to develop working relationships with Sandians, relationships that should benefit both the Army and Sandia in the future."

## Army Science Board Meets at Sandia

The Army Science Board, which advises the Secretary of the Army and high-level Army officers, held its fall plenary meeting at Sandia last month. During its three days here, the Board spent half its time in briefings, tours, and demonstrations of Sandia programs; the rest of its time was spent in meetings.

People representing a wide range of professions and disciplines serve on the 80-to-90-member Board. One of them is Andy Lieber (5220), who has been a Board member for five years. Andy arranged and hosted the Board's visit. Max Newsom (9120) was Sandia's program chairman.

## Sympathy

To Robert Urias (7818) on the death of his father in Albuquerque, Oct. 20.

To Alton Anderson (2565) on the death of his mother in Iowa, Oct. 23.

## LAB NEWS

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JIM WALSTON (3155) CARTOON commemorated the time that Everet Beckner (then 6000) and other high-energy folks ran out of gas while taking then-President George Dacey for a tour of the Waste Isolation Pilot Plant near Carlsbad. More details in the Antojitos column.



## Sandia: Healthy, Well-Recognized

The basic theme of VP Dick Claassen's (8000) recent "FY86 State of the Labs" speech to Sandia Livermore employees was that all indicators point to a healthy Sandia.

Some of the highlights from his speech follow:

- The W87 program was completed well ahead of schedule for the first production unit. Much of the credit for that success goes to Sandia Livermore for its important part in the program;

- Sandia people have received national recognition and several awards this year. These include Gus Simmons (1640), who received the E.O. Lawrence Award; Monte Nichols and Dale Boehme (both 8313), who won an IR-100 significant technical achievement award for their X-ray microanalyzer; and Peter Witze (8362), who received the SAE Horning Award for his combustion research;

- The Labs' recruiting power is evident in the "spectacular credentials" of the newly hired technical people;

- A normal hiring program is being resumed after several months of a hiring freeze at SNLL caused by the impact of the Gramm-Rudman-Hollings legislation;

- The Livermore budget for this new fiscal year is \$136 million, up \$15 million from FY86 (see FY87 budget story).

Discussing the mission of the Labs and how it has evolved over the years, Dick pointed out that Sandia started as a weapons lab and still continues in that primary role, but the sophistication of research work today far exceeds anything thought of in the 50s. He gave examples of the fine work done in understanding the effects of tritium and helium on metals, the sophisticated codes used in designing the B83's crushable nose, and the new kinds of materials developed to support weapons programs at Lawrence Lab.

"Over the years our job has changed because we work very closely with the seven integrated contractors that are part of the DOE complex," Dick explained. "Their people have become more capable and are doing a number of things we used to handle. So we have made a deliberate change in our interfacing and headed in the direction of more sophistication. We need to be distinct from the nuclear labs because we project ourselves as an engineering development lab, and we've established a very nice reputation as having the best capabilities along those lines."

Even though the Labs' mission remains national security, which includes the weapons programs and associated activities such as safeguards and verification, the reimbursables and energy programs are growing.

Talking about the reimbursables — funding that comes from agencies other than DOE — Dick said there are a number of reasons that Sandia is more involved today in this area. One is the recognition by others of our expertise and technological abilities. Another is that facilities in the weapons program are quite expensive, so obtaining funding in parallel research areas helps share the expense. Still another is that weapons programs go up and down as projects are completed; reimbursables can keep the work load at a constant level.

Reimbursables represented only eight full-time equivalent people at Livermore just two years ago; last year the number rose to 37, and this year it will reach 52. Some 60 percent of that effort is connected to Strategic Defense Initiative (SDI) work. "Most of the SDI work here has been set up in a generic way so that the technology being developed can also be applied to a number of other activities that may come to us in the future," Dick emphasized. "We are therefore not critically tied to the political success of SDI funding, yet we are developing some fine new technology that will help that program should it continue to go well." He envisions a future ceiling of 75 to 80 people in reimbursable areas, maybe concentrated in two main projects rather than in several smaller ones as is the case today.



VP DICK CLAASSEN delivered his final "SNLL State of the Labs" talk to an auditorium full of Sandians.



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Turning to the topic of energy research, he said, "We are in the Department of Energy so we have an obligation to support energy programs, and that is viewed as a priority right behind the weapons work. Even though energy work has decreased in recent years, we [Sandia management] are all convinced that the nation's energy problems will return and that that will turn the funding around again at some point. There is no question in the mind of management about the support for the combustion facility; it is not uncommon for Albuquerque people to mention the CRF as a good example of how a federally supported lab can interact with private industry and the academic community."

Dick had kind words for the solar energy work accomplished at Livermore: "Even though after a decade of solar energy research here it is being consolidated back at Albuquerque, we have some achievements of which Livermore Sandians can be proud — Solar One, designed by Sandia Livermore, delivered 40 percent more electricity to the Southern California Edison power grid this year than last year; the central receiver design report has been issued and will be the international design guide for solar central receivers for many years; and the molten salt experiment, done in conjunction with people at the Central Receiver Test Facility in Albuquerque, was successfully completed this year."

Touching on the reorganization that involves the transfer of two directors (8200 and 8300) to Albuquerque as well as an additional vice-presidency (Exploratory Systems Development 9000) created there, Dick said it was triggered in part by Tom Cook's (20) retirement and in part by Irwin Welber's (1) decision "to bring together the elements that give us the foresight to see where we should be going." He assured employees that, even though Livermore is losing strong directors and Dick himself will be retiring next May, "We have developed a lot of good management people, and I'm optimistic — especially since Irwin Welber operated a branch lab for AT&T so he has a personal feeling for what it's like to be out here at the end of the pipeline."

In summary, he restated that Sandia is "very healthy, a well-recognized lab that has a reputation for getting its job done and doing it well. We are very fortunate to be in a lab that has clear missions. One final point—I find the spirit of cooperation here just delightful, and the thing that impresses me most is how well you people do your jobs — I think it's really great!"

### Sympathy

To Carl Furnberg (8162) on the death of his mother in Portland, Ore., Sept. 5.

To Art Hull (8176) on the death of his mother in Livermore, Oct. 21.

### Take Note

Walter Bauer (8340) was an invited speaker at the National Academy of Science and Engineering symposium, "Selected Frontiers in Science and Technology," held at Irvine. Some 400 scientists and engineers from industry and academia around the country participated. Walter's presentation, "Advanced Processing of Electronic Materials in the United States and Japan," will be the subject of an upcoming LAB NEWS article.

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The Oct. 18 issue of *Science News* noted a swelling interest in the flora, fauna, and fault lines of Cordell Bank, a 9-by-5-mile submerged "island" 50 miles northwest of San Francisco. That interest is due in great part to the persistent efforts of diver Bob Schmieder (8348) over the last ten years (for coverage of early days, see LAB NEWS, Nov. 27, 1978). According to the article by Stefi Weisburd, Cordell Bank is on its way to becoming a national marine sanctuary because of the more than 400 plant and animal species — some new, others rare or endangered — identified by divers on Bob's expeditions. Also, the hilly bank's depth contours (a shallow 120-200 ft. below the ocean surface, right next to 10,000-ft.-deep waters) have been charted with swath — multibeam — sonar sounders by NOAA (National Oceanic and Atmospheric Administration) as part of its 3.9-billion-acre mapping of U.S. waters.

As one of only two tiny map sites that have been declassified by the Navy, the underwater island is "the only public showcase of what NOAA's systems can really do," writes Weisburd. Bob and a fellow imagist, William Kruse, took NOAA's bathymetric charts a step further. Not content with the 40-metre resolution (a scale of 1:20,000) available for Cordell Bank, they used copies of raw data tapes made in 1985 and a small computer to produce images of bank features with a resolution down to four metres. (Now Bob is ready to publish an article in *California Geology* on terraces running around the perimeter of the bank, complete with estimates of their heights.) Their next step? To improve the resolution of certain areas to two metres that will allow better pinpointing of biologically interesting places to dive.

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Several Sandians took part in a corporate volunteers workday recently at Buenas Vidas Youth Ranch outside Livermore. Giving up a Saturday to help clean up the site were Sally Antonchuk (8182), John Hinton (8478), Karen Quock (8263), Joe Damico (8351), Gary Drummond (8301), Scott Anderson (8153), Guido Castro (8184), Vic Ham (8312), Dick Jones (8445), and Barry Schrader (8201). Eight corporations supplied some 100 volunteers for the work project sponsored by the Corporate Community Involvement Council at the foster care facility.



## Quasicrystals: Neither Crystalline Nor Amorphous

Jim Knapp (1111) and David Follstaedt (1112) are among the pioneers studying a new phase of solid-state materials—quasicrystals. They have developed new methods for creating the materials and have performed basic research to begin defining their properties.

Quasicrystals appear to be a phase intermediate between crystals, such as diamonds or quartz (which have a regularly repeating, predictable structure), and amorphous materials, such as glasses (which have a disordered structure). In contrast, quasicrystals do have an ordered structure, but without any regular, repeating pattern. As a new class of materials, quasicrystals may prove to have unusual properties, distinct from either crystalline or amorphous metals. It's possible, for example, that these materials may be extremely hard.

David and Jim received a Basic Energy Science (BES) Materials Science Research Award for their work with quasicrystals (see related story). The quasicrystals they studied are called icosahedral phases, because they show diffraction patterns with icosahedral (20-sided) symmetry when viewed under a transmission electron microscope (see photo). Such a diffraction pattern (first noted at the National Bureau of Standards) was early evidence of the quasicrystalline structure of the new materials.

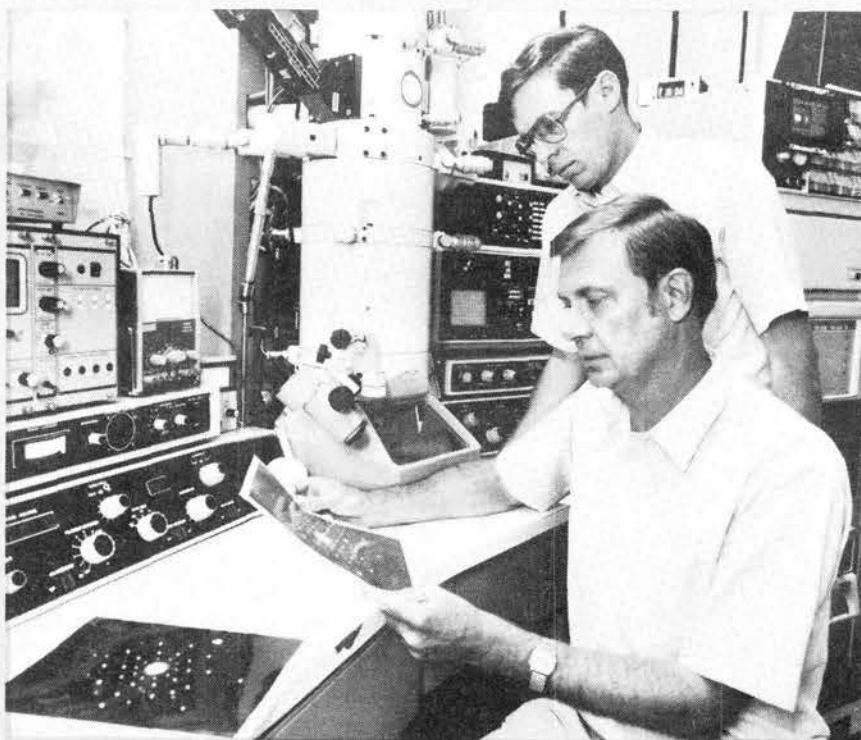
Much of the work with quasicrystals has involved aluminum alloys, and Jim and David developed a method to anneal (maintain at an elevated temperature without melting) aluminum/manganese, aluminum/ruthenium, and aluminum/manganese/silicon layers in the solid state to form the phase. This technique and other methods of formation (using laser, ion, and electron beams) are leading to a new understanding of the properties of quasicrystals.

### Kinetics, Thermodynamics, Structure

"Basically, we're interested in the kinetics, thermodynamics, and structure of the new material," says David. "Each of the techniques we've used has provided some insight into the nature of the quasicrystals we've formed." For instance, using a pulsed laser beam provided information about kinetics; specifically, that the quasicrystalline phase nucleates (forms the basic units of its structure) from the melt in a period equal to or shorter than 20 nanoseconds—20 billionths of a second.

The solid-state annealing process David and Jim developed involved heating an aluminum/manganese sample in the sample holder of a transmission electron microscope. The sample was formed of very thin, sequential layers of aluminum and manganese deposited on a microscope grid. Samples were heated to 250°-425° C, and this annealing produced the quasicrystalline phase in times as short as one minute.

Two noteworthy points: These temperatures are lower than the melting points of either aluminum or manganese, and the formation of the new



DAVID FOLLSTAEDT (1112) and Jim Knapp (1111) examine a diffraction pattern of a quasicrystalline aluminum alloy. The device in the photo is a transmission electron microscope, used to examine the quasicrystals.

phase involved a process of solid-state interdiffusion; that is, the alternating layers formed a uniform mixture by diffusing into each other by thermal processes. Jim notes that "Potentially, this method should make it possible to produce large quantities of the material cheaply"—an important finding if commercial uses of the material are developed.

### Discovered at NBS

Quasicrystals were discovered in 1984 at the National Bureau of Standards laboratory in Gaithersburg, Md. They were first produced by melt-spinning — squirting molten aluminum-manganese onto a rotating copper wheel cooled by water. A splat-quenching process, in which a drop of melted material is squeezed quickly between two cold plates, is also used.

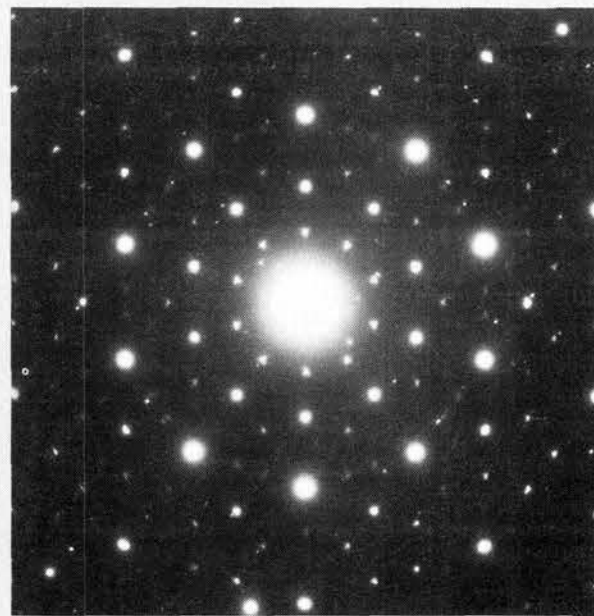
In contrast, the methods developed at Sandia form very thin surface layers of the phase, starting with alternating thin layers of aluminum and other materials deposited on a substrate. "Because of Sandia's ion implantation facilities and experience with electron beams and lasers, we have a range of surface modification capabilities that we could apply quickly to the study of icosahedral materials," states Jim.

The substrates David and Jim have used include aluminum, iron, silicon, and, more recently, synthetic sapphire. "After the surface layers melt, the substrate acts as a heat sink, giving us rapid cooling of the alloy," says David. Such quick cooling is important in the techniques used at Sandia, which include laser beam and both line-source electron beam and pulsed electron beam melting. Samples formed on the inert sapphire substrate allowed the researchers to determine the melting point for quasicrystalline aluminum-manganese: about 860°C; that finding is a first.

The laser beam and electron beam methods all melt the metal mixture, which is then cooled

rapidly to form the quasicrystalline phase. The annealing process David and Jim developed and the ion beam approach, on the other hand, form the phase by interdiffusion in the solid state.

Using the various methods, Jim and David have formed samples with quasicrystalline grain sizes from as large as 8 microns in diameter down to 2 nanometres (20 angstroms). A number of experimental results, including the fact that even small grains exhibit icosahedral diffraction patterns, have convinced them that the quasicrystalline structure is not just an unusual crystalline formation, but is a distinct phase of matter, as are gases, liquids, plasmas, and crystalline and amorphous solids. ●BG

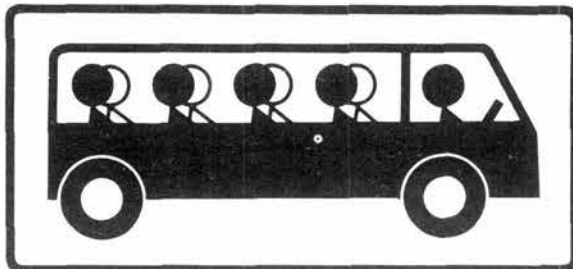


DIFFRACTION PATTERN of icosahedral aluminum-manganese. Each concentric ring of spots is made up of ten diffraction points, reflecting a five-fold rotation axis that is impossible for true crystals. Such quasicrystals exhibit a symmetry that can be represented in three dimensions as an icosahedron (twenty-sided regular solid).

Continued from Page 1

## Awards

share of the BES research budget. Also, most of the old and new projects at Sandia are interdisciplinary, frequently involving two directorates and two or more divisions; the cooperation of the groups is especially impressive." As a result of these awards and the quality of its work, Sandia is gaining increasing recognition for its materials science research. ●BG



## Commuter Notes

Lots of room — in fact, too much — on the Sanchez buses serving Sandia from: 1) Los Lunas, Bosque Farms, and the Highway 47 Loop, and 2) Freeway & Isleta Pueblo, Los Lunas, Los Chavez, Belen, Rio Communities, and Highway 85.

If you live in an area served by one of these buses, get information on the benefits of bus-riding from June Aydelotte (3543) on 4-RIDE.



## Budget Organization Gets a Jump on the Numbers

Most of us don't think two years ahead on budgeting matters. But for the staff in Budget and Financial Planning Dept. 140, it's a way of life.

"Sandia's budget process consists of three phases," says Linda McEwen (143). "The first — the request phase — starts in the fall, and involves determining our budget level for the fiscal year that begins two years from that time. For example, we started the request phase for the FY87 budget early in FY85. And right now, we're beginning the request phase for the FY89 budget."

The request phase involves gathering information from DOE, which sets program requirements and some limits on budget numbers for the fiscal year beginning two years hence. It's also a time when Dept. 140 seeks internal guidance from Sandia management and line organizations on programs the Labs wants to pursue and on new ideas. Working with line organizations, the budget advisory committees, and the Labs top management, the budget organization prepares program priorities, dollar estimates, and justifications. After an internal review, Sandia's budget request documents are submitted to DOE in four parts from December through the following spring. The budget requests for FY89 also include projections into the 1990s.

"DOE lets us know if any potential prob-

lems are foreseen, and we make adjustments as necessary," says Linda. "Then [the following fall] DOE's budget — including Sandia's requests — is sent to OMB [Office of Management and Budget] for review. Around Thanksgiving DOE receives feedback from OMB, including information on what the President will accept for the budget that he will submit to Congress early the next year." (The FY88 DOE agency budget is now at OMB, and Sandia will get some indication later this month of changes — if any — that might affect the overall FY88 budget level for Labs programs.)

The second phase of Sandia's budget process — allocation — determines how, by program, that overall funding will be spent. The allocation process begins after the President's budget message to Congress, taking into account any new information that message might contain. Allocation activities continue through the spring and summer, with a close eye on ongoing Congressional action on appropriations. Sandia management sets preliminary estimated on-roll population levels, and Labs budget advisory committees establish case targets; case objectives are later reconciled with estimates of case costs. Once these data are reviewed and approved by the budget advisory committees late in the summer, Sandia's budget

for the following fiscal year is set, subject to final Congressional decisions.

The budget merry-go-round's last phase is the period when the current year's budget is implemented. "We're doing that right now for FY87," says Vadare Cornelison (143), who recently took over Linda's job as Org. 100's external liaison person. In this assignment, Vadare keeps informed on budget-related legislation, and is responsible for keeping in touch with DOE budget people in Washington.

"During the final phase," Vadare explains, "the Labs implements program plans for the current year, monitors costs versus budget, and exercises controls as necessary. If budget revisions are necessary to meet cost objectives, they're carried out during this period."

In summary, Sandians who work on the Labs' budget must be jugglers of sorts, because at any time of year all three budget process phases are in full swing — each for a different fiscal year. For instance, currently it's the implementation stage for the FY87 budget, allocation activities are about to begin for the FY88 budget, and the request phase has started for FY89 — and, by the way, Sandia just completed FY86 "on budget."

Continued from Page 1

## Budget

ing (CIM), Phase IV, at SNLA and SNLL, \$4 million.

The Gramm-Rudman-Hollings bill, passed by Congress in December 1985, will not trigger funding cuts at Sandia in FY87 as it did last year, according to Bill. "We absorbed a cut of about \$30 million last March as a result of G-R-H deficit targets," Bill says. "That cut was substantial — about five percent of our DOE-funded budget. However, we were able by flexible planning to weather the storm with-

out significant disruption. The Labs made some programmatic changes — for example, deferral of some weapon activity and cancellation of other weapon activity, and placing a freeze on all except critical-need hiring.

"Because Congress managed to meet the G-R-H deficit reduction requirements for FY87 [reduction of the deficit to \$144 billion, with a \$10 billion leeway], we will not face cuts this fiscal year," continues Bill. "The national deficit problem has not gone away, however, and Congress will face more difficult decisions when it considers the FY88 budget. The deficit target for FY88 is less than that for

this year, and the Tax Reform Act of 1986 will result in a net revenue loss in FY88. So, many problems remain on the table — problems that will affect the budget outlook for future years."

Sandia is in, and continue to be in, an era of budget constraints, cautions Bill, "though none of these constraints will be devastating to Sandia. We don't predict growth or reduction — just level funding.

"Labs employees can look to the future with confidence, and can be assured that flexible planning will allow us to do our job, whatever the national priorities." ●PW

## Fun & Games

**Bowling** — Sandoe Bowling Association's September Bowler-of-the-Month awards go to: Men's Scratch, Jim Hall (2858), 691; Women's Scratch, Ruby Cochrell (6400), 574; Men's Handicap, Jerry Long (7111), 641; Women's Handicap, Ruby Chavez, 688.

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**Golf** — Sandia Golf Association (SGA) held its annual banquet and election of officers on Oct.

21. SGA officers for 1987 are: Carleton Palmer (3551), president; Mark Calvin (3532), vice-president; Dan Buller (1111), secretary/treasurer; William Curtis (2157), handicap director; Edward Underhill (3716), tournament director; Michael Quinlan (7833), league director; and Donald Overmyer (1151), publicity director.

Two awards were presented for outstanding individual tournament play: Low Gross, Phil Fagan (123), Association Champion; and Low Net, William Lut-

gen (2853), President's Cup. Bruce Kay (1841) received the Most Improved Golfer award. If anyone is interested in joining the Association next season, contact one of the SGA officers.

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**Karate** — Congratulations to karate expert Eric Lamb (3154-4). He's the Grand Champion of Kims Open Invitational, held Oct. 18, at Wells Community Park. He also placed first in the blackbelt light-weight competition.

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**Swimming** — The Kirtland Aquatic Club is looking for swimmers for its masters or 6-18 age groups. Workouts are from 5:30-7 a.m. or 6-8 p.m. Mon.-Fri. If you are interested in joining, call Don Case on 266-7615.

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**Exercise** — A Multiple Sclerosis-sponsored exercise class is currently being conducted at the Anna Kaseman Hospital Gymnasium. Meeting from 10-11 a.m. on Monday, Wednesday and Friday, this class is for those who are handicapped or disabled by multiple sclerosis or other causes, and for senior citizens. Those who are arthritic, wheelchair-bound, or walking with assistance should also benefit from the specific flexibility, mobility, and stability techniques; no aerobics are involved. The classes are taught by Jeri Loeber, R.N., and Cecilia Roth Muntz. For more information, call the Multiple Sclerosis Society on 888-4418.

LOOK OUT, FISH! Recent retiree Jose Guzman (2526) has won many trophies in 23 years of deep-sea fishing contests in Guaymas, Mexico. "I look forward all year to the tournament," said Jose. "It's a big thrill to hook into a 111-pound sailfish. I have a feeling inside that, to mark my retirement from 28-1/2 years at Sandia, I'll finally win the overall title." Jose has treated many of his co-workers to samples of his home-smoked trophy-sized fish.





# Events Calendar

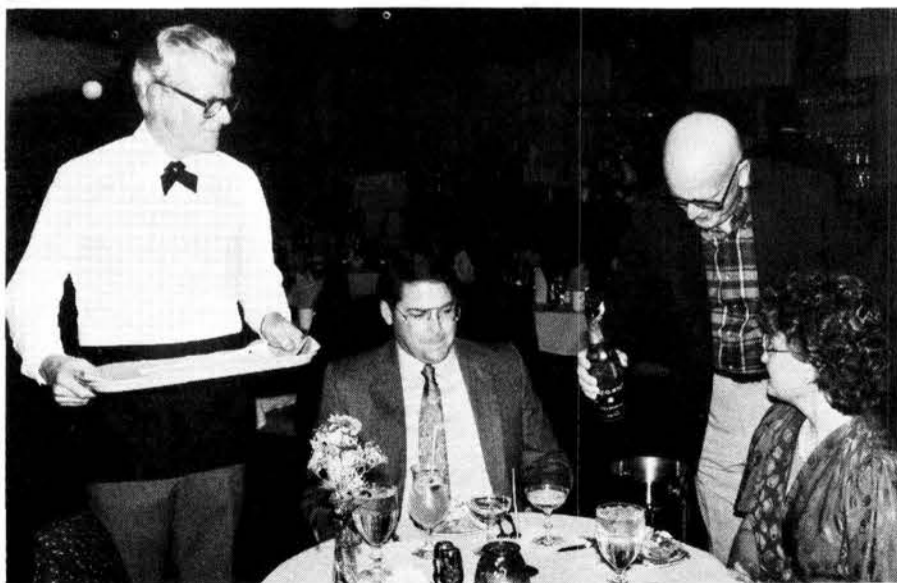
- Nov. 7 — UNM Faculty Concert: Michael Chapdelaine, guitar, and Bradley Ellingboe, vocal; 8:15 p.m., Keller Hall, 277-4402.
- Nov. 7-8 — Tapestry Art Show, Fine Arts Gallery, NM State Fairgrounds, 265-1791, ext. 228.
- Nov. 7-9 — "The Foreigner" by Larry Shue, Obie and Outer Circle Critics' award-winning comedy about a very shy Englishman who finds himself in backcountry Georgia; 8 p.m. Tues.-Fri., 6 & 9 p.m. Sat., 2 p.m. Sun.; Albuquerque Little Theatre, 242-4750.
- Nov. 7-9 — Ballet, "The Snow Queen," based on the story by Hans Christian Andersen; 8:15 p.m. (2:15 p.m. Sun.), Popejoy Hall, 884-9443 or 299-3663.
- Nov. 7-9 — "A Life in the Theatre," young playwright aims the spotlight at the artifice of acting; 8 p.m. Fri., 6 & 9 p.m. Sat., 2 p.m. Sun.; Albuquerque Little Theatre, 242-4750.
- Nov. 7-10 — "Holiday Olé," arts and crafts show sponsored by the Junior League of Albuquerque; 10 a.m.-7 p.m. Fri.-Sat., noon-5 p.m. Sun.; South Exhibit Hall, Convention Center, 898-3798 or 766-7800.
- Nov. 7-16 — "Imágenes de Garcia Lorca," original dance-drama inspired by the gypsy poetry of Garcia Lorca; 8:15 p.m. Fri.-Sat., 3 p.m. Sun.; La Compania de Teatro de Albuquerque, Nuestro Teatro, 256-7164.
- Nov. 7-Dec. 31 — Exhibit, From the Weaver's View: Indian Baskets of the American West; 9 a.m.-4 p.m. Mon.-Fri., 10 a.m.-4 p.m. Sat.; middle gallery, Maxwell Museum of Anthropology, 277-4404.
- Nov. 7-Jan. 5 — Exhibit, "Tiger, Tiger," photographs of animals of India; 10 a.m.-5 p.m., NM Museum of Natural History, 841-8832.
- Nov. 8 — "Espejo del Barrio," bilingual musical drama; 7 p.m., South Broadway Cultural Center, 848-1320.
- Nov. 8 — Hollyberrry Fair, St. Mark's 37th Annual Christmas Bazaar; 9 a.m.-3 p.m., St. Mark's on the Mesa Episcopal Church (431 Richmond Pl. NE), 266-2788.
- Nov. 8 — "In the Good Old Summertime," the Sweet Adelines' annual show; 2:30 & 8 p.m., KiMo Theatre, 848-1374.
- Nov. 8-30 — Albuquerque United Artists Maya Twist, an invitational show in the spirit of the Maya ancient civilization; Albuquerque Public Library, 243-0531.
- Nov. 8-Dec. 7 — "New Mexico Tapestry, Images of Our Own," paintings and sculptures by New Mexico artists; 1-4 p.m., Fine Arts Gallery, NM State Fairgrounds, 265-1791, ext. 228.
- Nov. 9 — Concert, clarinet and saxophone, Keith Lemmons (UNM faculty); 8:15 p.m., Keller Hall, 277-4402.
- Nov. 9 — "Festival of India," celebrated dancers



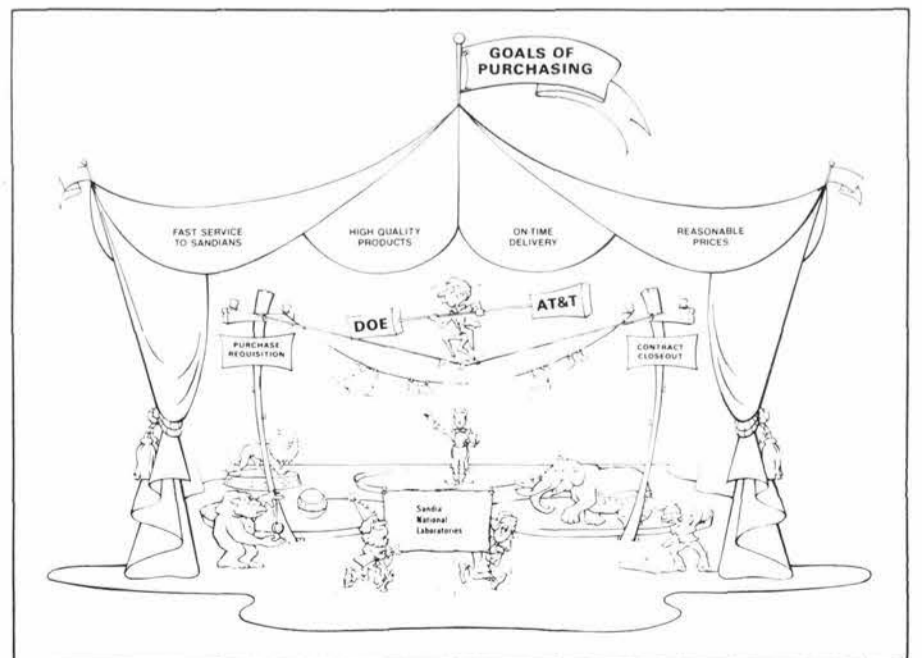
DOE'S DISTINGUISHED ASSOCIATE AWARD was presented to Tom Cook upon his retirement. Signed by DOE Secretary John Herrington, the award recognized Tom for "his outstanding contributions to the Department of Energy's national security and energy missions. As Executive Vice-President of Sandia Corporation, his managerial skills, initiative, and dedication have resulted in significant benefits to the nation's defense and energy well-being." The award was presented by AL Manager Ray Romatowski (right) during a ceremony attended by President Welber and several others who have worked with Tom over the years.

- and musicians from India; 8 p.m., KiMo Theatre, 848-1374.
- Nov. 9 — Fine Arts Music Series: The "Grandio" Spanish Lute Orchestra, singers and dancers from Madrid, Spain; 4 p.m., First United Methodist Church (4th & Lead SW), 243-5646.
- Nov. 9 — Central NM Audubon Society, Nature and Wildlife Film Series: "Birds of Seven Continents," films by ornithologist Roger Tory Peterson, presented by wildlife photographer Herman Kitchen; 7:30 p.m., Popejoy Hall, 881-9387 or 255-0307.
- Nov. 10 — Jazz concert, David Sanborn; 8 p.m., Popejoy Hall, 277-3121 or 277-5602.
- Nov. 12-30 — "Fool for Love" by Sam Shepard, NM Repertory Theatre production; 8 p.m. Tues.-Sat., 2 p.m. matinee Sat. & Sun.; KiMo Theatre, 243-4500.
- Nov. 13-16 — Southwest Arts and Crafts Fair, 10 a.m.-6 p.m., Exhibit Complex, NM State Fairgrounds, 296-5591.
- Nov. 14 — "Inca," folk performance of native dances and music from Peru; 7:30 p.m., South Broadway Cultural Center, 848-1320.
- Nov. 14-15 — Los Novicios Christmas Craft Show; 10 a.m.-8 p.m. Fri., 10 a.m.-6 p.m. Sat.; free, Convention Center, 892-9551.
- Nov. 14-15 — Concert, NM Symphony Orchestra, program features Joseph Swensen and Carter Brey performing the Brahms Concerto for Violin and Cello in A minor, Op. 102; 8:15 p.m., Popejoy

- Hall, 842-8565 or 277-3121.
- Nov. 15 — Keller Hall Jazz Series 1986: NM Jazz Workshop presents the Bobby Bradford Motet from Los Angeles with special guest John Carter; 8:15 p.m., Keller Hall, 842-6659 or 243-3208.
- Nov. 16 — Keller Hall Concert: Michael Ferris, 4 p.m., Keller Hall, 277-4402.
- Nov. 17 — "Quetzal, Music and Movement from the Heart of Maya," Xochimoki in a story taken from Mayan mystical legend of the coming of the first musicians to Earth, performance in conjunction with the Mayan exhibit at the Albuquerque Museum; 7:30 p.m., KiMo Theatre, 344-7911 or 344-8484.
- Nov. 17-Dec. 12 — "Earth and Fire, an Elemental Art Show" by Sue McQueen; 7:30 a.m.-10 p.m., Union Gallery, UNM Union Bldg., 277-2331.
- Nov. 17-Dec. 12 — "Waterworks," juried watercolor exhibit by the NM Watercolor Society; 9 a.m.-6 p.m., Thompson Gallery, UNM Union Bldg., 277-2331.
- Nov. 18 — Concert, Chamber Orchestra of Albuquerque season opener, featuring violinist Sergiu Schwartz; 8:15 p.m., Albuquerque Little Theatre, 247-0262.
- Nov. 19 — The UNM Press Lecture Series, "Environment vs. Tradition: A Double Blind for Conservation," by William DeBuys, author of *Enchantment and Exploitation*; 7:30 p.m., Woodward Hall, 277-2346.



WINNERS OF A CONTEST to design a poster that shows the role of Purchasing at Sandia were Barbara (3732) and Patrick (3745) Hoffman. Their prize was a dinner for two at the Coronado Club, with 3700 Director Dick Russell serving as their wine steward and 3710 Department Manager Art Arenholz their waiter. The Hoffmans were quite impressed with their personalized service: "Both were most gracious, though Art was a bit slow." Luckily, neither Art nor Dick plans a second career in the restaurant business. (Photo by Oscar Goodwin, 3155)



PURCHASING'S WINNING POSTER, designed by the Hoffmans and finished by Tech Artist Ray Chavez (3155), was displayed at the Department Managers Conference last month. Each Sandia directorate prepared a poster to illustrate its contribution to the Sandia effort.





# Wishing on a Star

By Arlene Price (3330)

Thursday, Nov. 20 (the Thursday before Thanksgiving), is the 10th anniversary of the American Cancer Society's *Great American Smokeout!* Help us celebrate by joining in the GAS theme and being a star—taking a day off from smoking.

Who knows? — If you really put forth the effort, it could be the first day of the rest of your life as a non-smoker. Then you'd really have something to be thankful for on Thanksgiving.

To help you become a star and quit smoking during the GAS, Medical will provide you with all kinds of goodies, including fact sheets, quit-smoking tips, and survival kits filled with peanuts, mints, and sugarless gum. There are also tips for your friends who wish to adopt you as a smoker. You can also pick up "I'm Wishing on a Star" postcards and "I'm a Star, I Quit Smoking" buttons.

If you arrive early, you can get a great new brochure called, "How to Stay Quit over the Holidays." One location where you can pick up these helpful aids is the lobby of the Medical Department from 8 a.m. to 1 p.m. Another location is the cafeteria. Remember the date — Thursday, Nov. 20.

The goal for GAS 86 is to get at least one in every five smokers to quit smoking for at least 24 hours from Wednesday midnight to Thursday midnight. Last year, more than 23 million out of 54 million American smokers participated. Let's aim for the same goal at Sandia, where we are already way ahead: Only 10 percent of Sandians smoke, compared to the national average of 30 percent. So gather up your courage and join us.

## Why Should I Quit

As a non-smoker, you are decreasing your risk of:

1. A heart attack, one of the nine leading causes of premature death.
2. Lung cancer, which has one of the lowest survival rates of any of the cancers.
3. Emphysema (no cure) and other respiratory ailments.
4. Bladder cancer and other cancers too.
5. Having a baby that is smaller, or lower in birth weight.
6. Stroke, receding gums, bad breath, ulcers, etc.

And, as a non-smoker, you are increasing your chances to:

1. Have a healthy heart, strong lungs, and healthy body.
2. Live a healthful lifestyle.
3. Be free of a nasty, expensive habit.
4. Set a positive example for your children.
5. Stop worrying about the damages of smoking.
6. Feel proud of your accomplishments.
7. Improve the quality of your life.

You don't have to just *wish* on a star — you can *be* a star by quitting smoking during the Great American Smokeout.

## Welcome

### Albuquerque

- George Bonney (3426)
- Gilbert Chavez (3426)
- Linda Hall (3426)
- Carol Harrison (3551)
- Connie Martin (3531)
- Steve Young (3426)

### Florida

- Alvin Lang (5322)

### Nebraska

- S. L. Hingorani-Norenberg (2515)

### New Mexico

- Joan Gabaldon (3426)

### Texas

- Daniel Segalman (1521)

Here are a couple of current volunteer opportunities for employees, retirees, and family members. If you would like more information, call Karen Shane (4-3268).

**ENTREPRENEURIAL ENGINEERING** class at UNM is seeking four or five engineers from Sandia to meet with groups of five to seven students for the remainder of the semester. Course objective is to follow a product from conception to production. Volunteers with engineering expertise are needed to discuss product design, manufacturing techniques, whatever subjects will give the students a feel for the real world of engineering. Class meets Thursday evenings from 6:30 to 9:30.

**DESIGN HOUSE '86**, sponsored by the International Society of Interior Designers, will showcase a new home featuring the latest building and design trends (including a faucet that turns on automatically when hands are positioned under it). Benefits from

the sale of tickets (\$5 each) will go to United Way. Volunteers are needed at the featured Tanoan home from Nov. 22 through Dec. 13. Five volunteers are needed for each of the two- and three-hour shifts to greet the public and to sell or collect tickets at the door.

**REHABILITATION CENTER**, a United Way agency that offers vocational training and sheltered employment, needs volunteers to repair and adapt machines for assembling writing pens. The machines will then be used by program trainees in their work assignments.

**AMERICAN CANCER SOCIETY** is holding a fundraising Phone-a-Thon from 5:30 to 9 p.m. Nov. 18-20. Volunteers are needed for each evening to make calls to previous Cancer Society contributors. Callers will be given computer printouts listing those who have contributed in the past and who have been notified by postcard that they will be called.

# Women's Program Speaker Highlights Tips for Travelers

Carla Chute, Eastern Airlines sales manager for New Mexico and El Paso, spoke on "Safety Tips for Women Travelers" at a recent Coronado Club luncheon sponsored by the SNL Women's Program Committee.

Chute, whose job involves much business travel, recalled some of her experiences while traveling and discussed what she'd learned along the way. For example, during one of her flights — from St. Louis to Albuquerque — she found herself receiving much-unwanted attention from the male seated next to her. (As an airlines employee using a pass, she'd been assigned the one remaining seat on the plane after all paying passengers had been seated.)

"The guy [in the next seat] appeared to be very pleasant before takeoff, but once in the air, he turned into a real monster," says Chute. "He wouldn't take a 'no' answer when I repeatedly refused a dinner-date offer from him, and he became downright nasty by the time we reached Albuquerque."

In retrospect, Chute says one of her major mistakes in that encounter was to exchange business cards with her seatmate while they were chatting before the plane took off from St. Louis. "That [exchanging business cards] makes it very simple for the other person to harass you long after the flight has ended," she says. (In this case, Mr. Bad-Guy was in such a rage by the end of the flight that he tore up Chute's card and tossed it on the floor. She did not tear up *his* card, however, when he requested her to do so. "I told him I'd be keeping that card in case I ever needed it for future reference," she says with a smile.)

If planes aren't full, passengers may move to different seats if they find themselves in an uncomfortable situation. Women travelers, especially, should keep this in mind, says Chute.

People on planes have a tendency to tell that person next to them a lot of information about themselves: they'll never see each other again, right? Sometimes — but not always. "Don't give another person a bunch of gratuitous information — marital status, whether or not you live alone, a lot of job details," Chute cautioned luncheon attendees. "You just might encounter them again — and in an environment not nearly as safe as the interior of a plane."

If pressed for a great deal of personal information by a fellow traveler, it's OK to fib a little, she says. "Our mothers told us never to tell a lie," says Chute. "But it's all right from time to time to forget that 'don't ever lie' rule. If you're single, and you're



CARLA CHUTE, Eastern Airlines sales manager, cautions travelers (especially women) not to tell fellow travelers their life stories.

asked if you are, tell 'em all about your husband and six kids!"

Then there are the baggage tags — those requirements of the airlines that do such a beautiful job of identifying you to the outside world. Not only do they tell everyone what your name is; the home address is there too, just for the looking. Chute suggests buying tags that cover up the information; it's there if needed to send a stray piece of luggage on its way, but it's not available to the casual glance.

A baggage tag was the culprit, Chute recalls, on one of her business trips. She began receiving calls in her hotel from the man who had earlier sat next to her on the plane. He told her he'd noticed her name on the baggage tag attached to her carry-on bag. Combining that with the fact that she'd told him where she'd be staying ("I tend to chatter too much," says Chute), it was simple enough for him to telephone the hotel and ask to be put through to her room. Again, a case of too much gratuitous information.

Chute covered other topics as well, including special accommodations that some hotel chains now have for women. A videotape of her talk is available in the Tech Library for those who couldn't attend the luncheon.



Charles Harmon (6451) was recently re-elected vice president of Ideas in Science and Electronics, Inc. (ISE) for 1987. ISE is the non-profit corporation that annually organizes New Mexico's largest electronics exposition and symposium. ISE '87 will be held May 5-7 at the Albuquerque Convention Center, with exhibit booths displaying the latest in electronics technology.

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The International Symposium on Robot Manipulators: Modeling, Control, and Education is scheduled Nov. 12-14 at the Albuquerque Hilton. The Symposium is sponsored by the UNM College of Engineering and IEEE Control Systems Society, and organized by UNM Robotics Research Laboratories. Irwin Welber (1) will speak on the "Factory of the Future" at the Symposium luncheon on Nov. 13. Ray Harrigan (6228) is a member of the Symposium national organizing committee and is co-chairman of Symposium Session TA2, "Path Planning and Tracking." Other Sandians making presentations are Victor Johnson and Clifford Loucks (both 2545).

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The 1987 Annual Reliability and Maintainability Symposium (RAMS) is scheduled for Jan. 27-29 at the Dunfey City Line Hotel in Philadelphia. The theme is "Assurance Technologies in the Automated Engineering Environment." A high-level Military Initiatives Panel, composed of senior flag officers, will discuss new service thrusts to improve R&M of military hardware for the next decade. The panel will be moderated by Russell Shorey, Director of Weapon Support Improvement Group, Office of the Assistant Secretary of Defense (Acquisition and Logistics). Items to be addressed by the panel include: what the field problems are today; how to improve R&M and what is being done about it; monitoring warrant/guarantee effects; and what CAD/CAE/CAM support will be required. For more information on the symposium, contact J. L. Rodriguez, Allied Bendix Oceanics Division, (818)367-0111, ext. 2276.

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A UNM visiting scholar is seeking scientists, especially those in the materials sciences, to join in

an ongoing colloquium on Ancient Technologies and Materials. Spearheaded by Gordon Bronitsky of the Latin-American Institute, the colloquium will serve as a network for facilitating cooperation among researchers — from many disciplines and many institutions around the state — who are interested in archaeological problems. The first lecture presented by the colloquium will be Nov. 18 at 3:30 p.m. in the Latin-American Institute (801 Yale NE). Gordon will speak on "The Use of Materials Science Approaches in the Study of Ancient Pottery." For more information, or to be placed on the colloquium mailing list, call Gordon on 888-9660.

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For more than a century, scholars and laymen alike have been captivated by the aura of mystery that surrounds the ancient Maya. After touring the U.S. and Canada for the last year and a half, an exhibit, "Maya: Treasures of an Ancient Civilization," returns to the Albuquerque Museum Nov. 16 through Feb. 8. The exhibit was organized by the Albuquerque Museum with the cooperation of the Instituto Nacional de Antropología e Historia in Mexico, the Instituto de Antropología e Historia de Guatemala, and the Department of Archaeology in Belize.

Exhibit hours are 11 a.m.-5 p.m. Tuesday, 1-9 p.m. Wednesday, 11 a.m.-9 p.m. Thursday and Friday, and 10 a.m.-5 p.m. on weekends. Entry to the exhibition is every half hour, excluding the last half hour of the day. Admission is \$3. Tickets may be purchased for individuals and groups at all Worldwide Ticketcenters in Albuquerque and Santa Fe. A descriptive brochure including the reservation form for group tours, school tours, and receptions is available in the LAB NEWS office, Bldg. 814. For more information, contact Marilyn Stebbins at the Museum on 243-7255.

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Spend a Sunday afternoon tasting wine, and enjoying entertainment and conversation at the Fourth Annual Wine Tasting Benefit for KNME-TV5. The event is scheduled for Nov. 9 from 1:30-4:30 p.m. at Barcelona Court (900 Louisiana NE). Members of the California Wine Institute and New Mexico wine

growers have donated 125 different varieties of wine. Admission for the wine tasting is \$10 for KNME-TV members and \$15 for non-members. To purchase tickets in advance, or for more information, contact Susan Dederman or Lynn Boyd on 277-2121.

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"Coaching Caregivers," sponsored by Hospital HomeCare (HHC) and the Presbyterian Hospitals, is a free workshop for people who are caring for an elderly, ill, or disabled person. The workshop, Nov. 20 from 12-4 p.m. in the lobby of Kaseman Presbyterian Hospital, will permit family members and caregivers to talk individually with nurses and therapists from the HHC clinical staff and the Presbyterian Hospital. For more information, call Lezlie Ann Schubert or Mary Zack, in the community liaison office at Hospital HomeCare, on 842-7100.

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See "Birds of Seven Continents," travel "North to the Top of the World," go "Out Where the West Ends," and take an "Autumn Journey to Alaska" with The Central New Mexico Audubon Society at Popejoy Hall when the Society presents its 17th Annual Nature and Wildlife Film Series. The film series is presented and narrated in person by the nature photographer who made each film. Tickets for individual shows are available at the Popejoy Hall box office on the night of each show. For more information, call Craig Andrews on 881-9387 or Edith Johnson on 255-0307.

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If you are interested in proposed federal legislation on mandatory retirement, you will want to see the documentation compiled by Virginia Hill (3152). Per her request, NM Senator Jeff Bingaman provided copies of Senate Bill 2 ("to amend certain Federal laws to prohibit mandatory retirement, eliminate barriers to the employment of older workers, and provide incentives for part-time and full-time employment of such workers") and the portion of House Bill 3838 on vesting standards. For a copy of the seven pages, send a self-addressed company mailing envelope (9 x 12-in.) to Div. 3162.

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Park, ride, and relax on Sun Tran when you take a tour of the traditional "little lights" on Christmas Eve this year. The Luminaria Tours, which include the Albuquerque residential areas of the Country Club, Old Town, and Los Altos Park, have become a major attraction. Tickets are limited to 10 per purchaser; all requests are filled on a first-come, first-served basis. Tickets (\$5/each) are available by mail order this year, and will be sold specifically for 10 tours, each made up of 14 buses, departing every 15 minutes beginning at 6 p.m. Ticket order requests should include: a check (local), money order, or certified check; a self-addressed, stamped envelope; and preference of tour by departure time, and several alternative choices. Mail your request to: Sun Tran, 601 Yale Blvd. SE, 87106. Requests may also be dropped off at the same address. The Park & Ride site for the tours will be at the northwest corner of University and Stadium SE. For more information, call Sun Tran on 843-9200.

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The Sanado Woman's Club will hold its monthly meeting on Nov. 11 at 11:30 a.m. at the Marriott Hotel. The program will be presented by Madeline Dunn of the Keep Albuquerque Beautiful Committee. Lunch is \$10.50. For reservations, call Marsha Cook on 296-3064.

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An intermediate Spanish class that meets Tuesdays and Thursdays at the Coronado Club began Nov. 4 and will continue through Nov. 25. The class is for those who have taken an introductory class or who speak Spanish and would like to have formal lessons. Contact the Recreation office on 4-8486 for details on how to sign up.

## Supervisory Appointments



CLARENCE FILIP (154-1) and BOB BACA (3434)

countant in Programmatic Support Division 141.

Before joining Sandia, Clarence was an accountant with Yates Petroleum Company. He has a BA in business administration with an emphasis in accounting and an MA in accounting; both degrees are from Eastern New Mexico University. Clarence earned his CPA certificate in 1981. He is a member of the American Institute of Certified Public Accountants.

Clarence likes to fish and hunt in his spare time. He and his wife Donna have two children and live in NE Albuquerque.

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BOB BACA to supervisor of Patrol Division-North 3434, effective Sept. 1.

Bob joined Sandia in September 1981. He was a member of Security Plans and Audits Division 3432 until his recent promotion. Bob has participated in the security planning for the protection of special nuclear materials and the Executive Protection Program.

Bob has a BA in psychology and an MA in public administration from UNM. He is also a graduate of the FBI National Academy. Before coming to Sandia, he served 21 years with the Albuquerque Police Department and retired as a captain. He is a member of the FBI National Academy Association, the American Society for Industrial Security and the International Association of Chiefs of Police.

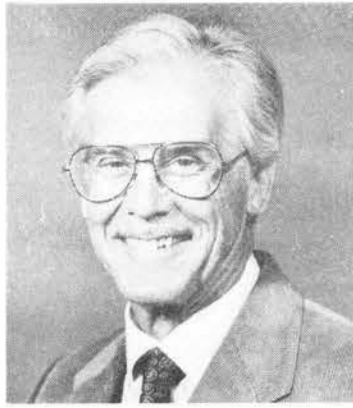
In his spare time, Bob enjoys community volunteer work and a variety of outdoor activities. He and his wife Rita have three children; they live in Taylor Ranch.

CLARENCE FILIP to supervisor of Payment Processing Section 154-1, effective Oct. 1.

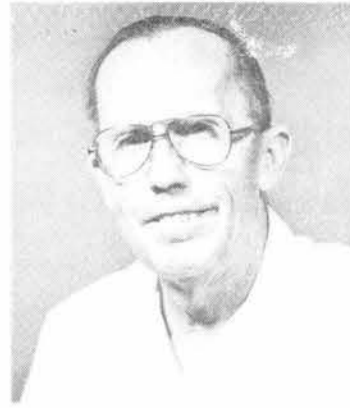
Clarence joined Sandia in August 1980 as an accountant in the Auditing organization. Six months later he joined the General Accounting division. After three years, he became a member of the Budget and Financial Planning Department, working as an ac-



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Don Rost (3316) 35



Eldon Upchurch (5252) 35



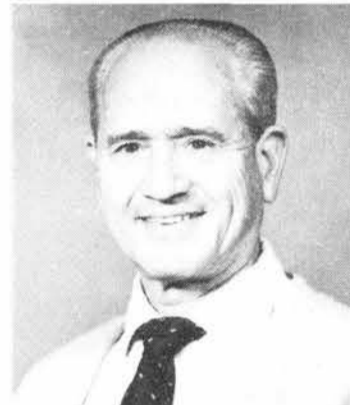
David Williams (6449) 20



Larry Johnson (5123) 30



Shirley Wallace (155) 15



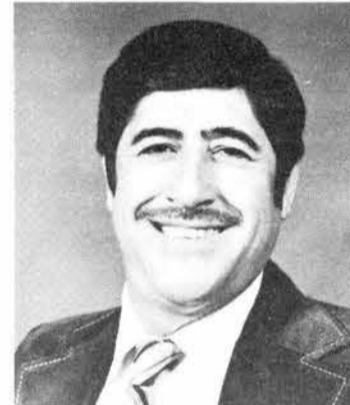
Al Foster (1612) 30



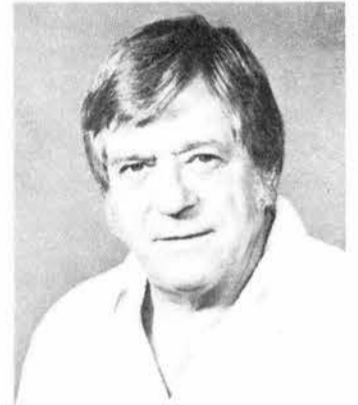
John Kinney (2311) 30



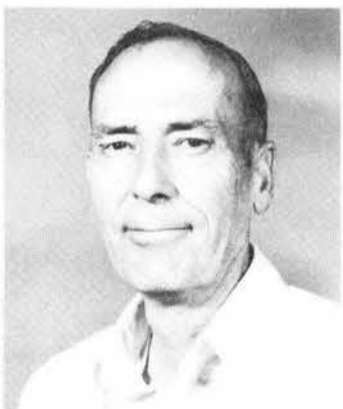
Geoffrey Mueller (2341) 20



Demmy Edwall (7251) 10



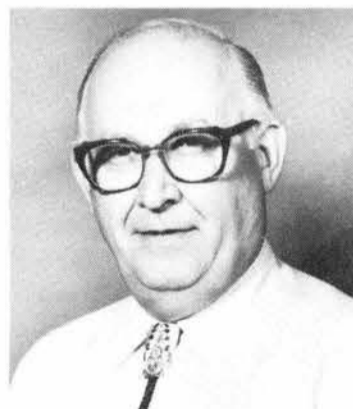
John Biesterweld (5257) 30



Erwin Stewart (7812) 30



Clarence Collins (2334) 10



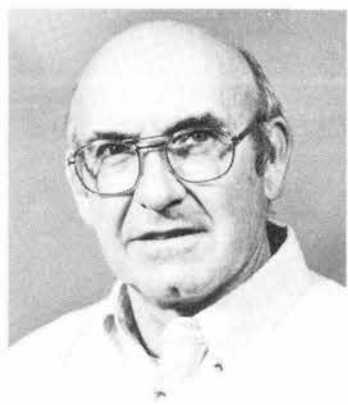
Gary Swagerty (5111) 30



Carol Patterson (1640) 20



Lee Adam (3714) 35

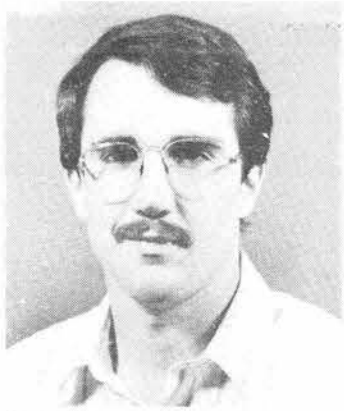


Frankie Potts (7541) 20

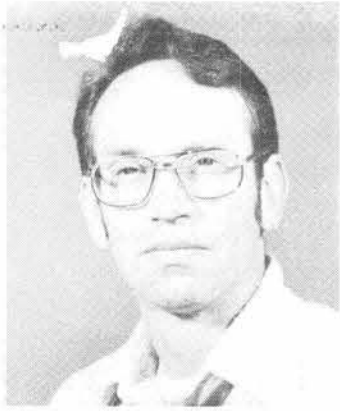


Bob Craven (1232) 15

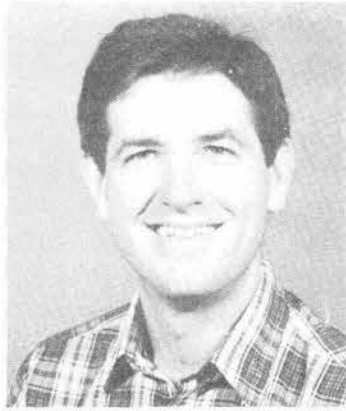




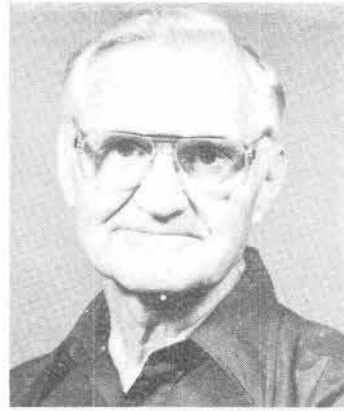
Jeff Wilcoxon (2334) 10



Dave Tallant (1823) 10



Wendell Jones (1832) 10



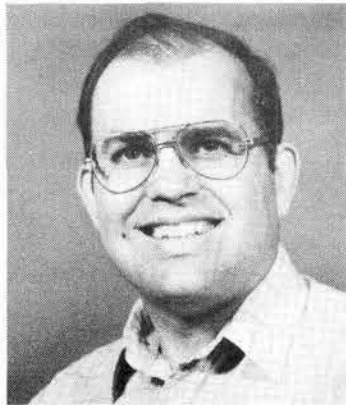
Jim Reed (7473) 30



Roger McKenzie (2340) 35



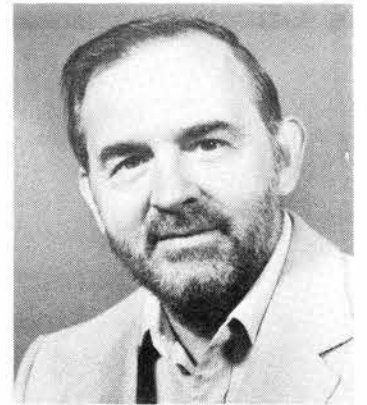
Paul Gallegos (3154) 20



Gary Rochau (1253) 10



Sue Tenbroeck (3321) 20



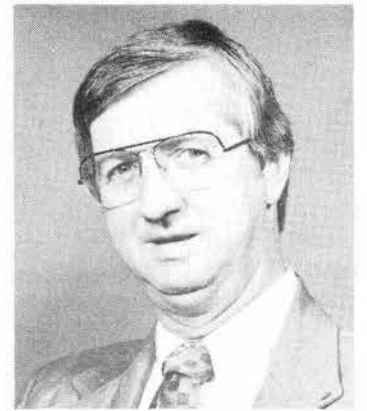
Billy Caskey (5267) 30



Louann Grady (2812) 10



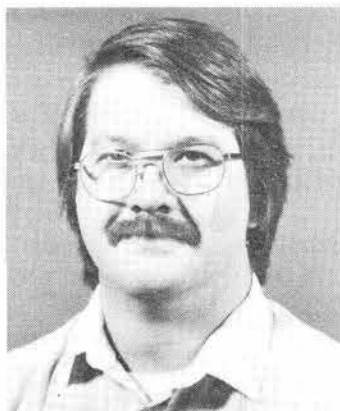
Robert Ewing (341) 25



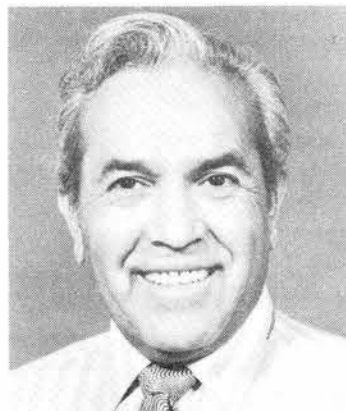
Jim Tichenor (2533) 30



Leo Doyal (2124) 25



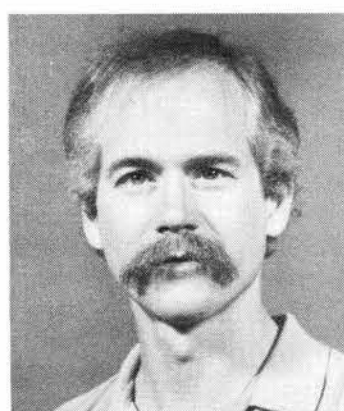
Charles Ringler (5249) 10



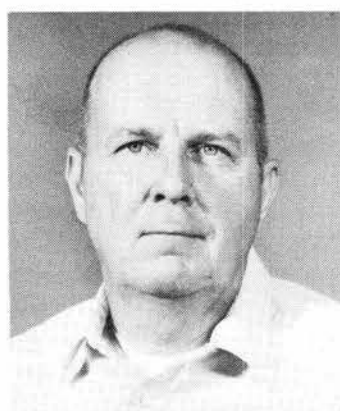
Bob Velasquez (3551) 30



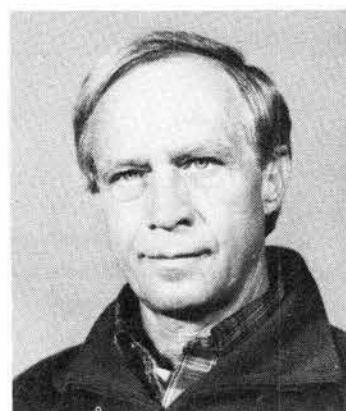
Bob Kelly (3450) 35



Ken Ystesund (5218) 10



John Phelan (1622) 25



Bob Schwing (3312) 10



# The Great American Smokeout

Take a day off from smoking • Nov. 20, 1986



UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

## WANTED

- PET TRANSPORT CAGE, airline-approved, under-seat version, good condition. Hawkinson, 281-1281.
- 20-LB. LIQUID PROPANE CYLINDER, small; thermostatically-controlled gas heater. Prior, 281-5532.
- MOTORHOME to rent to bring elderly parent home for Christmas, no use of plumbing or kitchen, Dec. 19-20 and Jan. 3-4, Caskey, 296-6372.
- TURNTABLE, variable-speed. Hill, 294-7534.
- VIDEO TAPE of balloon fiesta for Oct. 4, KOAT, VHS format. Bagley, 821-8247.
- HOUSEMATE to share large home in NE, non-smoker, no pets. Mills, 823-4484.
- OLDER LP STEREO RECORDS, classical and popular. VanDenAvyle, 898-6474.

## LOST

- SILVER CROSS PEN w Sandia T-bird on clip, at Credit Union on Oct. 27 about 1:30 p.m. Pritchard, 293-5297.

## MISCELLANEOUS

- AERIAL VIEW OF SANDIA LABS, 16" x 20" color photo, mounted, \$20. South Highway 14 Village Project, LAB NEWS, Bldg. 814.
- PHOTOGRAPHIC electronic flash unit, Sunpack model 522, Thyristor circuitry, automatic from 1 to 45 ft., \$75. Montoya, 296-4268.
- GE STEREO w recorder, tape deck, 2 microphones, \$250; 2-piece wall unit; pull-down desk w 2 drawers, matching bookcase w drawer and cupboard below, \$150. Horn, 293-8462.
- WALNUT DINING ROOM TABLE, one arm chair, five side chairs plus 3 leaves and custom table pads. Lender, 256-0777.
- TWO-HORSE TRAILER, '81 WW, tan, extra pinstriping, electric brakes, gravel guard, reinforced floor-back doors, rubber mats, radial tires, \$1900. Ruggles, 281-2141.
- CANOPY BED, white, French Provincial, 6-drawer dresser, full-size mirror, bedspread w canopy top, \$275. Nevarez, 831-9652.
- BOOKSHELF SPEAKERS (pair), Realistic Solo-4, oiled-walnut cabinets, 16" high, 6" wide, 8" deep, 5" x 7" element w whizzer cone, \$20. Schkade, 292-5126.
- TWO 36" TABLE LAMPS, gold, wrought iron, w night lights, originally cost \$75 ea., selling for \$25 ea. Vigil, 821-8059.
- FIREWOOD, pine, will deliver, truck load for \$90. Waddles, 293-1805.
- TRAVEL TRAILER, '67 Silver Streak, 23', fully equipped, new tires, \$3500. Harvey, 298-8278.
- WEDDING DRESS, size 9, V-neck, long-sleeved, Qiana fabric, lace trim on neck and sleeves, short train, \$40. Barr, 821-5870.
- SLIDE TROMBONE w case, "Holton Collegiate," \$175; train set, HO gauge and slot car racing on a 4' x 8' board w rolling stock, \$150. Heid, 892-8608 after 6.
- 60" TABLE, for dining or conference, octagonal, w 8 black vinyl chairs, \$300. McGuckin, 299-1342.
- ANTIQUENGLISH DRY SINK and matching dressing table w attached round beveled mirror, \$300. Sinneros, 898-0156.
- 1920s BEDROOM SET, 2 dressers, 1 chest of drawers, vanity, headboard, and footboard, extra-long bed, \$800. Tomek, 299-0471 after 5, leave message.
- NEW FORMICA, approx. 80 sq. ft., marble pattern, light brown, best offer. Gendreau, 268-3436.
- C-H POWDER BALANCE; Dies: 30-06, .308, 7mm Remington Mag., 38 Special. Bailey, 294-4218.
- S&W MODEL 28 .357 REVOLVER, \$195; S&W Model 39 9mm automat-

- ic, \$165; Desert eagle .357 automatic, \$495; Contax 35mm SLR w accessories. Shamblin, 293-2568.
- 25" TV, \$150. Trujillo, 865-5438 after 5:30.
- INFANT PLAYPEN, \$20; infant's outdoor wooden swing, \$8; 8-track tape player w speakers, \$20; man's valet, \$20. Webb, 294-8341.
- CONSOLE PIANO, Cable Nelson, w bench and music, 3 yrs. old, \$1100 OBO. Pregent, 281-1414.
- TWIN BED FRAME, headboard, springs, \$75. Davis, 256-1740.
- TV, 25" Heath Kit, works, 13 yrs. old, manual included, \$75. Randour, 298-5684.
- WHITE OAK DESK w chair and glass top, \$100; exercise jogging trampoline, 33' sq., \$25. Shrouf, 821-0765.
- CAMPING TRAILER, 1971 Coleman, fiberglass top w canvas sides, stove, sink, sleeps 6, needs new canvas, \$250. Davis, 281-2183.
- SHIPPING CRATE for medium or large dog, \$35. Demmel, 299-5639.
- SKI BOOTS, Lange XL1000 series, women's size 9-1/2, \$45. Roth, 822-9086.
- VCR: matched pair, Sylvania Matsushita 4-head, IR 15-function remote, model VC3610, \$650 pr. or \$350 ea. Burkhardt, 256-3310.
- LOUVERS for '84 '85 Nissan Sentra hatchback, \$50. Freeman, 296-2945.
- FIREPLACE BLOWER, Sears Heater, used one winter, make offer. Bauer, 266-8480.
- ANTIQUETYPEWRITER, \$15; 2 wooden swiveling bar stools, \$15/ea.; aluminum screen door, \$15. Ruby, 299-0767.
- CROSS-COUNTRY SKIS, boots, and poles, new, various sizes. Reuter, 884-8347.
- CHINA and matching crystal, service for 8, silver leaf pattern, \$150; stoneware, service for 4, \$25. Ford, 292-6589.
- FILM: 15 rolls of Ektachrome 400-36, 1/88 expiration date, \$5/ea. or \$65/all. Miller, 255-7716.
- SOFA BED, full-size, brown and white plaid, \$250. Dell, 291-0274.
- DOG, free to good home, beagle cross, friendly, neutered male, 8 mos. old, good watch dog, good with children. Frytz, 296-3813.
- HOT TUB, 6-1/2' sq., portable w thermal cover and automatic timer, 115/220 volts, \$1650. Heider, 897-0752.
- REFRIGERATOR, Sears, 17 cu. ft., \$200; Kitchen-Aid portable dishwasher, \$75; Sears stove, gas top, electric oven, \$125; kitchen sink, \$75. VanDenAvyle, 898-6474.
- CALCULATORS, Marchant rotary, make offer; gas space heater, \$25 OBO. Mozley, 884-3453, leave message.
- WATER BED, super-single w heater, bookcase headboard, rose-decorated mirror, 6 drawers, padded sides; end chair, \$170. Hultine, 255-8656.
- PORTABLE HEATER, 120 volt, fan-forced, 97,000 BTU/h, 10-gal. kerosene or No. 1 fuel oil tank, w handle and wheels, \$150. Muirhead, 281-2925.
- BLUE SOFA, end tables, lamps, and chair. Curry, 884-4666.
- WOOD STOVE, Acme Stove Co., 30w x 21d x 32h, brick-lined, \$200 OBO. McTigue, 256-1752.
- MICROSCOPE, phase contrast, Unitron model MPA-ZM, zoom lens, \$125. Cook, 281-5689.
- SCREENS, casement window-types, two 16" x 48", eight 16" x 35-1/2", four 16" x 23-1/2", \$1/ea. Luikens, 881-1382.
- TWO CHAIRS, burnt orange, velvet, swivel-rocker, \$125/ea. Harris, 299-4559.
- WATERBED, super-single size, pedestal, frame, bookcase headboard, liner, mattress, and heater, \$125; cat breeder cage, cat carriers. Kirby, 299-2948.
- GARAGE and lawn sale, Nov. 7-8, 10317 Apache Ave. NE. Davies, 296-6905.
- STEREO COMPONENTS, couch, color TV (needs work), Atari video unit and cartridges, each under \$40. Keese, 299-1327 after Nov. 8.

- HEADBOARD, ivory, full-queen cutout; extra-large chest; large night stand and matching mirror; \$300. Hines, 821-8592.
- RANCH OAK SET: from American Furniture, includes 3-piece sectional couch, 2 end tables w drawers, 2 matching lamps, \$350. Orth, 292-6174 after 5.
- RICCAR SEWING MACHINE, model 3500, 2 mos. old, cost \$349, asking \$275. Knapp, 294-6359.
- PICKUP CAMPER SHELL, Leer, 8', long wide bed; white, cab-height Lexan bubble windows; cost \$387, asking \$125. Womelsduff, 255-5028.
- SCANNER, portable programmable, VHF: 30-54 108-136 138-174 MHz, UHF: 380-512 MHz, 16-channel, \$180. Campbell, 294-6000.
- ROWING MACHINE, dual-piston, paid \$95, will sell for \$65. Jones, 281-3617 after 6.
- OAK DINING TABLE, 48" diameter, 4 captain's chairs, \$325 OBO. Eley, 242-8530.
- TWO ALUMINUM STORM DOORS, Corning built-in countertop cutting board, Mozley, 265-2625 or 299-4204 after 5.
- HAND-CARVED STUDENT DESK w stool, \$39; 2-hp radial arm saw, 8" blade, w metal stand, \$90. Hofer, 344-8047.
- WASHER AND DRYER, Kenmore, white, \$100 pair; Montgomery Ward refrigerator, white, 19.6 cu. ft., \$400. Langkopf, 293-4076.
- WATER HEATER, natural gas, \$25. Romero, 281-9423 after 7.
- SLIDE-ON CAMPER, 1983 Jayco "J" pop-up, fits mid-size or stepside pickups, ice box, stove, storage. Foltz, 291-0051.
- TWIN BEDS, pair, bookcase headboards, box springs, mattresses, \$550; single twin bed, bookcase headboard, box spring mattress, \$150. Granfield, 268-1942.
- MATCHING SOFA BED, loveseat, chair, and ottoman, \$300; recliner, \$125; humidifier, \$25; wheels and tires for Ford van, Aydelotte, 867-4143.
- YAMAHA ELECTRONIC ORGAN, model A60U spinet (1980), \$580 OBO. Clifford, 281-5083.
- AST 6-PACK MEMORY EXPANSION, I/O, calendar clock for IBM/PC compatibles, complete w 384K, serial, parallel, & game ports; RAM disk, print spool, etc. Fisher, 881-8072.
- SCHOBER THEATRE ORGAN, solid state, full pedal clavier, Leslie, percussion, reverberation added, spares, handbook, \$4750. Hurley, 296-9264.
- THREE BAR STOOLS, cane seat, \$10/ea.; 2 windsurfers, \$450 ea. Bentz, 299-3448.
- KING-SIZE WATERBED, waveless fiberfill, heater, and vibrator. Stixrud, 298-0478.
- CHILD'S BEGINNER DRUM SET, 8-piece Buddy Rich, \$45. Pitcher, 292-4091.
- TELEMARK SKIS, Rossignol Descent, 210cm, 2-degree side edge bevel, 1-degree base edge, \$70. Ritchey, 268-7620.
- PUPPY, free to good home, 3-month-old Doberman-German Shepherd cross, Norwood, 266-2717.

## TRANSPORTATION

- '72 CHEV. SUBURBAN, 4-WD, 350 V-8, PS, PB, AM/FM cassette, new AT and exhaust system, \$2000. Hawkinson, 281-1281.
- '87 CATALINA 22 SAILBOAT w swing keel, 5 HP Honda outboard, fully equipped, 2 mos. old, \$11,750. Jones, 296-3998.
- '73 PLYMOUTH SATELLITE, 318 engine, AC, \$1200 OBO; '82 Husqvarna 430, Summers, 881-7765.
- '84 AUDI 5000S, fully loaded, all power, new Michelins/brake pads, below book or consider trade. Vigil, 296-5335.
- BICYCLE, Takara lady's 10-spd., 26" wheels, \$60. Gendreau, 268-3436.
- '79 VW RABBIT, 4-dr. Watson, 281-2691.
- '80 BUICK SKYLARK LIMITED, 4-dr., AT, AC, stereo. Kidd, 299-0035.

- '78 FORD PICKUP, 302 engine, 4-spd., dual tanks, long bed, 80K miles, \$2500 OBO. Trujillo, 865-5438.
- '81 DODGE ARIES K WAGON, AT, AC, PS, PB, \$2300. Coleman, 883-7498.
- '82 CHEV. S-10 PICKUP, long bed, Durango package, AM FM cassette, AC, PS, \$4000 OBO. Berg, 898-6818.
- '70 PONTIAC LEMANS WAGON, V-8, AT, 94K miles, one owner, AAA diagnostic printout, \$700 OBO. Baca, 294-2387.
- '79 CHEV. IMPALA WAGON, complete service record, \$1500. Bauer, 266-8480.
- '76 TOYOTA COROLLA SR-5, 5-spd., AC, 25 mpg city, 33 mpg highway, \$1500. Strascina, 294-0305.
- '79 FORD 150 PICKUP, 4-WD, 4-spd., V-8, PS, heavy-duty rear bumper, air through tailgate, Houghton, 299-3386.
- '72 CHRYSLER NEWPORT, AT, PS, PB, \$500. Demmel, 299-5639.
- '81 FORD F150 4X4, 4-spd., 6-cyl., AM-FM cassette, new 6-inch lift kit, \$4500. Waddles, 293-1805.
- '79 FORD THUNDERBIRD, 59K miles, 302 V-8, AT, PS, AC, AM-FM cassette, new tires, \$2200 OBO. Dwyer, 291-8466.
- '75 FORD PINTO STATION WAGON, 4-spd., 2.3-litre engine, \$200. Rieden, 281-9491.
- YAMAHA MOTORCYCLE, 49cc, 100 mpg, automatic 2-spd. transmission, \$395. Altweis, 292-3884 after 5.
- '80 DATSUN 200SX, 5-spd., AM/FM stereo cassette, \$2500 OBO. Lockwood, 821-6331.
- '77 BUICK SKYHAWK, hatchback, 6-cyl., AC, AT, PS; '69 VW Bug, 4-spd.; AM-FM cassette on both vehicles, \$995/ea. Hoffheins, 293-5221.
- BICYCLE, Centurion Lemans, 12-spd., 21" men's frame, 27" wheels, McCornack, 296-3936.
- '71 VW BUS, 9-passenger, 8K miles on new engine, removable fold-down rear seats, \$1950. Pritchard, 293-5297.
- '80 FORD PINTO, 38K miles, AM/FM stereo, new tires. Fraley, 296-6795.
- '74 PONTIAC GRAND AM, 400 V-8, AC, AT, PS, PB, tilt wheel, cruise, bucket seats, service manuals, \$1100 OBO. Johnson, 823-1689.
- '76 CHEV. SUBURBAN, 84K miles, Silverado, 454 V-8, 3-seat, AM/FM stereo cassette, new AT, PS, PB, front and rear AC. Ney, 298-6329.
- '72 DUSTER, green, rebuilt engine, no body damage, \$500. Huston, 266-3566 after 6.
- '85 CAMARO IROCZ, V-8 fuel-injected, 305 cu. in., 4-spd., AT, stereo cassette, cruise, AC, PS, PB, power doors, one owner, \$11,500. Schmaun, 298-5192 after 5:30.
- '78 CHEV. MONZA, 45K miles, AM/FM stereo, AT, \$1700. Carlin, 292-5428.
- '79 OLDS 88 ROYAL, diesel, needs paint and injectors, \$800 OBO. Thahammer, 298-8521.
- '79 DATSUN 310, 4-spd., 2-dr., hatchback, \$1200. Garcia, 831-0395.
- '72 VW SUPERBEETLE, AM-FM stereo cassette, rebuilt engine, \$950 OBO. Mora, 821-6759 after 6 on weekdays.
- BICYCLE, Bertin, 10-spd., 53cm, alloy frame, rear rack, front bag, \$180. Cole, 884-8697.
- '79 DATSUN 510 STATION WAGON, AT, AC, 84K miles, \$2100. Geck, 299-5095.
- '79 CUTLASS SUPREME, one owner, power seats and windows, AM/FM tape. Randall, 821-0388.
- '76 CHEV. MALIBU, 67K miles, AC, radials, AM/FM stereo, PB, PS, \$1600. Hesch, 296-1367.
- '74 YAMAHA MOTORCYCLE, 175cc, \$200 firm. Marquez, 344-8455.
- '81 FORD ESCORT WAGON, 4-dr., AT, AM/FM cassette, cruise, low mileage, \$2595. Pruet, 293-6244.
- '83-1/2 NISSAN 4X4, 32K miles, accessories, best offer. Mitchell, 275-1527.
- '84 FORD BRONCO II, AT, AC, PS, cruise, AM/FM cassette, XLT package. Borneo, 291-0548.
- '76 CHRYSLER CORDOBA, cruise, tilt steering wheel, AM/FM cassette,

- \$1300. Pfeiffer, 299-3951.
- '85 FORD RANGER, red, 22K miles, AM/FM cassette, \$6000 OBO. Baker, 294-3334 or 293-0358.
- '78 SOUTHWIND, 25 ft., loaded, 4-kw generator, roof air, \$18,500. Barth, 294-3357.
- '81 C6750F HONDA MOTORCYCLE, 14K miles, w rack and extras, \$1000. Chown, 891-8637.
- '71 CHEVELLE MALIBU, 4-dr., maintenance record, V-8, AC, PS, PB, tilt-wheel, \$1100 OBO. Keiss, 299-6610 after 5:30.
- '69 DODGE MONACO, V-8, 54K miles, AT, AC, radio, \$1090. Ostensen, 296-4227.
- '77 FORD F150, 4-spd., 302 V-8, long bed, \$2400. McNiel, 869-6835.
- '71 MGB Tonneau, fully restored, fogs, stereo, \$3000 OBO. Young, 294-6228.
- '71 PORSCHE 914, repainted, reupholstered, Delarto carbs, Weltmeister suspension, \$4000 OBO; bicycle, Centurion Sport Deluxe, 10-spd., Blackburn luggage rack, \$90. Bentz, 299-3448.
- '82 YAMAHA 650 MAXIMA, less than 3K miles, \$1650. McCollum, 281-2856.
- '80 MOTORSCOOTER, 100cc, windshield dual mirrors, 2.4K miles, \$490. Burchard, 294-3557.

## REAL ESTATE

- 3-BDR. HOME, NE, 1-3/4 baths, ceramic tile, wood-stain trim, 1650 sq. ft., 9 yrs. old, 2-car garage, \$92,500. Sepulveda, 299-2805.
- 2-BDR. TOWNHOUSE, in Villa de Paz on Coors Rd., 1 mile north of I-40, 1030 sq. ft., country decor and wallpaper, pool, park, front yard maintenance included, \$54,500. Barnette, 831-4035.
- TOWNHOUSE, 6020 del Campo NE, Chimney Ridge, \$73,000. Frye, 255-8364.
- 1-BDR. HOUSE, 1 bath, hardwood floors, recently refurbished, near Wyoming Gate, real estate contract. Lucero, 892-2223.
- MOBILE HOME, '84 Schult, 14' x 70', lots of upgrades, set up in Four Hills Mobile Home Park, \$23,800. Ayers, 275-1500.
- MOBILE HOME, Conchas Dam, 14' x 68', furnished, large lot, gas and propane tanks, boat w Mercury engine, 10' x 10' shed, \$25,000. Harris, 255-6577.
- 3-BDR. HOME, Louisiana Zuni area, 1-3/4 baths, large lot, 1200 sq. ft., \$54,000. Pregent, 281-1414.
- 3-BDR. HOME, Heritage Hills, 1-3/4 baths, 1700 sq. ft., great room, decorator accents, professionally landscaped, large patio, \$104,500. Martinez, 822-0744.
- 3-BDR. HOME, 1-3/4 baths, covered patio, large lot, FP, double-car garage, 1 yr. old, offset dining area, Rio Rancho, \$57,000. Mitchell, 275-2474.
- 5 ACRES, El Rancho Grande Subdivision, gas and electricity, McIntosh area, \$9995. Burkhardt, 256-3310.
- 2-BDR. TOWNHOUSE, 1250 sq. ft., extras, backyard access, Eubank/Osuna area, \$15K CTL, assumable 8-1/2% FHA, no qualifying. Surbey, 293-7869.
- 3-BDR. HOME, study, LR, FR, brick front, ceramic floors, automatic sprinklers front and rear, 1885 sq. ft., La Cueva district. Carrigan, 821-5856.
- 4-BDR. HOME, Mossman, den, all hardwood floors, 2-car garage, large yard, near San Pedro and Montgomery, \$94,900. Smaller, 881-7981.
- 2-BDR. TOWNHOME, 2 levels, 1-1/2 baths, FP, 1100 sq. ft., vaulted ceilings, energy-efficient. Gurule, 292-4736.
- MOBILE HOME, 24' x 56' double-wide, 24' x 24' garage, 2 acres, 35 min. from Sandia, \$59,500. McCollum, 281-2856.
- 3-BDR. HOME, 1-3/4 baths, 1640 sq. ft., covered 400 sq. ft. patio, area NE of Constitution and San Mateo. Baca, 255-6187.



## No Blare, No Blast With Lesmen's Cast

IT'S EASY TO FACE THE MUSIC when Don Lesmen's crew plays those smooth (and danceable) tunes from the 40s and 50s. That Big Band sound will be very much in evidence next Friday night (Nov. 14) from 8-11:30 p.m. From 7:30-8, the Palamakia Dancers provide a special treat — Greek dances performed in Greek costumes. Start off this evening of entertainment and golden oldies by dropping in for the two-for-one special dinner beforehand; featured that night are prime rib or poached halibut — your choice of two entrees for \$14.95. Then dance your cares away to songs like "Moonlight Serenade," "Tuxedo Junction," and a lot of other swinging classics. Better get in line to make a reservation; Don and his group — and the Palamakia Dancers — always attract a big crowd. Call the Club office, 265-6791.

NO WOLF WHISTLING IN THE DARK for this group — especially not tomorrow (Nov. 8). The Coronado Wolfpack will be yelling, stomping, screaming, and howling in broad daylight as they get ready for the Lobo-Tulsa football game at 1:30 p.m. Yep, it's another famous tailgate party, starting at 11 a.m. in the KOB tailgate area close to UNM's ticket office at the Pit. This time the Pack party has a Mexican fiesta theme; beverages are furnished, and you bring along chile, posole, pinto beans — whatever hot stuff turns you on. Come on out for a rip-roaring time, and don't wear sheep's clothing — these wolves don't go for it!

NO HEARTS ON THEIR SLEEVES (or spades either) for this group. Nevertheless, the T-Bird card sharks plan to shuffle on in to the Club on Thursday, Nov. 13, for the next "Let's Get Ready for Vegas" session. The action starts at 10:30 a.m. It's your only chance to beat the dealer this month; the sharks won't meet again until Dec. 4.

A MONTH OF BRUNCH-SUNDAYS is what you wish for if you've experienced the Club's mouth-watering buffet food on Sunday mornings — and afternoons. Unfortunately, these VLC (very-low-cost) brunches occur only twice a month, and your only remaining opportunity in November is on the 16th, from 11 a.m.-2 p.m. For only \$4.95 (kids under 12 half price), the buffet offers all manner of goodies: ham, baron of beef, sausage, green chile, scrambled eggs, fruit juices, salad bar, and more. Bring your family and friends to the best brunch (and the best buy) in town. Don't forget to reserve your space.

THAT FREAK SNOW in October may be a harbinger of good things to come for Coronado Ski Club members; they're keeping their fingers (but never their ski tips) crossed, anyway. And they have a couple of events planned in November, just to keep everyone informed. The monthly meeting on Nov. 18 at 7 p.m. features Steamboat Springs, along with lots of info on USRSA Ski Week. As usual, those ever-fabulous door prizes will be given away to some lucky attendees.

The next night (Nov. 19), the Club sponsors a ski equipment repair clinic at 7 p.m. in the Eldorado room. This is where you learn how to get those barrel staves in shape before the first ski trip of the season, coming up on Dec. 5. Yes, we said December 5!

WAGON WHEELS KEEP ON TURNIN' for those Thunderbird RVers. They're getting the show on the road again from Nov. 18-20 as they head down I-25 for Elephant Butte Lake. More info from wagon masters Tom Brooks (344-5855), Bill Minser (299-1364), or Andy Railey (898-0519).

SINGLES CELEBRATE AGAIN this month with a right-after-work party on Thursday night, Nov. 20. Free munchies are available from 5-7 p.m., along with 50-cent draft beer and frozen drinks for only \$1.75. Bring along your dancing shoes; Graffiti plays a great selection of music from 6-10. More and more

people are showing up for these get-togethers because the secret is out: It's the friendliest bunch of folks *anywhere!* Mark your calendar and get in on the action.

WESTERN FLYER DOESN'T OFFER bargain air fares from here to L.A. What it *does* offer is some of the best country/western shuffle music this side of Las Vegas (N. Mex., that is). And it's all yours from 8 p.m.-midnight on Friday night, Nov. 21. Ahead of time, stomp on in for the two-for-one special (prime rib or fried shrimp; other entrees available also). Dust off those boots, saddle up, and gallop on over to the Club office to reserve your seat in the old corral.

HIGH ROLLERS are needed to fill remaining openings in the Club's Junior Bowling League. The group goes for the strikes every Saturday morning at Holiday Bowl. No age discrimination here: Everybody that's seven years old through high school age is welcome. Honcho Ciss Kelly says beginners should sign up too; there's coaching available. Give Ciss a call for more info (255-8011).

PSST! HERE'S A WORD OF WARNING for all you folks planning to party at the Club during the holidays. Catering honcho Maggie Pappas says lots of groups are booking space, so don't be left out in the cold; book your party ASAP. No room charge for Sandia and DOE organizations, so it's an outstanding deal.

AN ENGLISH PUB it's not, but the Club lounge is beginning to look more and more like the real thing. Dart leagues have formed, but they're still looking for a few people who go for a good time. Come out and hit the bull's-eye on Tuesdays and Thursdays. Warm up from 4:30-5:30 p.m., then get in the thick of the competition starting at 5:30. Free munchies, big-screen TV, and low drink prices are thrown in with the fun and games.

HANG ON TO YOUR BUCKS. In the first of a series of financial planning seminars to be held at the Club, Liberty One Corp. will show you some different ways of accumulating and saving money. Tax-saving ideas too. It's Nov. 13 at 4:45 p.m. at the C-Club. More info from Larry Siner at 823-2777.

SITTIN' ON TOP OF THE WORLD — or at least a part of it — is where you'll be when you sign up for some of those fabulous adventures cooked up by the C-Club Travel Committee. Here are some that should get your attention:

*Cherry Blossom World* — If you haven't ever been to Washington, D.C., when the cherry blossoms bloom around the Tidal Basin, you've missed the thrill of a lifetime. Here's your chance to set things

right. This trip to D.C. and historic Virginia comes up on April 4-11 — exactly the right time for the Cherry Blossom Festival. Combining that with all kinds of sightseeing in Washington (Capitol Hill, the Smithsonian, White House, Bureau of Engraving) and Virginia (Mount Vernon, Monticello, Bull Run) makes this one a real winner. There's also a tour of Richmond — site of the Confederate capitol. After an overnight stop there, it's on to Williamsburg, where you'll receive your Patriot's Pass (your ticket to all the things to see and do in Williamsburg). Tours of Yorktown and Jamestown are next on the agenda, and then it's back to D.C., just in time for the Cherry Blossom Festival Parade and a farewell dinner. The \$777/person tab covers all of the above, plus seven nights' lodging, RT air fare, charter bus, and more.

*Wheeling and Dealing World* — Wheeling (roulette) and dealing (blackjack) are what you do part of the time when you're in Laughlin, Nev. All this action is yours, once you've reserved space on a trip to Laughlin Feb. 20-22. For two nights you're headquartered at the Riverside Hotel. When you're not at the gaming tables, you have opportunities to tour Davis Dam and Lake Mohave (that's right — it's not spelled the same as the desert). A bargain price of \$105/person buys you round-trip charter bus fare, continental breakfast the first day out, one lunch and one dinner, snacks and drinks along the way, taxes and tips, and all of the above.

*Another World* — South America fits that description, and this is your chance to visit exotic places in that continent down south (Feb. 27-Mar. 12). First, there's a stop in Rio de Janeiro, and you get there just in time for Rio's wild and wonderful carnival. Then it's on to Buenos Aires, Sao Paulo, Lima, Cuzco, and the lost city — Machu Picchu. For \$2200/person, this jewel of a journey includes RT air fare, 12 nights' lodging, three dinner shows, lunch at Machu Picchu, daily continental breakfasts, and five city tours. Optional at extra cost are the Samba Parade and Baille da Cidade in Rio.

### Congratulations

To Lisa and Kerry Sturgeon (2113), a son, Zachary Eric, Oct. 1.

To Toni (3322) and Darrell (1617) Kirby, a daughter, Dia Té Lamari, Oct. 6.

To Janet (3533) and Carl (3431) Iafonaro, a daughter, Alicia Renee, Oct. 7.

To Sophie Montoya (3426) and Jose Trujillo, married at Sandia Pueblo, Oct. 11.

To Cynthia and Charles Jenkins (5261), a son, Brian Charles, Oct. 22.

To Patti Vigil (6425) and Dan Cover, married in Albuquerque, Oct. 25.



SANDIA'S FAMED MULTI-DISCIPLINARY APPROACH in technology is carrying over to administrative groups such as Payment Processing Division 154 and Customer and Supplier Accounting Division 155. Or perhaps Halloween had something to do with it.